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I.F.A.S. - Univ. of Florida

## Cotton Fiber and Processing Test Results



CROP of

1978



Agricultural Marketing Service  
U.S. DEPARTMENT OF AGRICULTURE  
Memphis, Tenn. 38122 September 22, 1978

## COTTON FIBER AND PROCESSING TEST RESULTS, CROP OF 1978

### Discussion of Test Results

Short staple samples tested from the Southwestern Area through September 15 this season are shorter and finer than a year ago, according to the Cotton Division, Agricultural Marketing Service, USDA. Cottons tested to date are stronger at zero gage tests and slightly weaker at 1/8" gage tests. Both Shirley Analyzer nonlint content and picker and card waste are considerably higher than a year ago. Yarns spun from these samples are weaker, but have higher appearance grades. Yarn imperfections are fewer than a year ago. The average spinning potential yarn number is lower.

Medium staple samples tested from the Southwest show cotton fibers to be slightly shorter, coarser and stronger than a year ago. Both Shirley Analyzer nonlint content and picker and card waste are higher than last season. Yarns spun from these samples are weaker and have lower appearance grades. The average spinning potential yarn number is lower this year.

These reports are published bi-weekly during the harvesting season and will be summarized in a comprehensive report at the end of the crop year. A detailed description of the tests shown in this report may be found in the summary report for the previous season.<sup>1/</sup> These reports are available on request from the Standards Section, Cotton Division, Agricultural Marketing Service, U. S. Department of Agriculture, 4841 Summer Avenue, Memphis, TN 38122.

<sup>1/</sup> Summary of Cotton Fiber and Processing Test Results, Crop of 1977,  
USDA, AMS, Cotton Division, August 1978.

Table 1.--Cotton:

Averages of fiber and processing tests from selected gin points in the United States  
through September 15, 1978

Staple group Area, and Crop year	Lots tested	Fiber test results						Processing test results					
		Fibrograph		Mike fine- ness		P & C waste		Yarn quality		Skein str.		Imperf- ections	Spin. Potent.
		2.5% span	50/2.5 unif.	Zero gage	1/8" gage	nonlint	nonlint	S A	P & C	Index No.	Index No.	Carded Yarn	Yarn No.
No.	Inches	Pct.	Rdg.	Mpsi	G/tex	Pct.	Pct.	Lbs.	22s	Index No.	Index No.	Carded Yarn	Yarn No.
Short Staple:													
Southwest													
1977	4	.98	45	3.8	91	22	3.3	5.2	102	105	11	48	
1978	6	.92	45	3.7	94	21	4.2	6.9	93	122	8	(24)3	36
Medium Staple:													
South Central													
1977	2	1.10	46	4.4	90	23	2.6	5.2	110	95	16	64	
1978	-	-	-	-	-	-	-	-	-	-	-	-	
Southwest													
1977	19	1.06	46	4.2	83	22	3.3	5.5	108	94	15	62	
1978	28	1.05	46	4.4	89	23	4.5	5.8	101	81	16	(88)3	51
Significant difference 2/		0.02	2	0.2	2	1	0.5	0.5	4 (22s)	5	2	3	

1/ Based on a limited number of samples of modal quality

2/ Minimum differences considered to be significant for comparisons in this table.

Parentheses indicate the neps per 1000 yards of yarn as measured by the Uster instrument.

Table 2 --Cotton, American upland short staple: Quality characteristics by production areas, crop of 1973

Production Area, Classification & Sample Number		Fiber Test Results										Processing Test Results - Carded Yarns										
		Grade	Stple span	2.5% span	Unif	Mike	Fiber Strength	Elong- at'n 1/8"	S.A. Non- lint	Color Raw Stock	P & C	Strength	Elongation	Appearance Index	Imperfect Ins	Spin. Neps/M Yards	Spin. Potential					
No.	Name & Code	32s	In	Pct	Rdg Mpsi	G/tex	Zero Gage	Gage	Gra	Yel	Waste	8s or 22s or 74 tx	22s or 74 tx	8s or 22s or 74 tx	8s or 22s or 74 tx	No.	No.	No.	No.	No.		
SOUTHWEST AREA																						
CENTRAL TEXAS																						
BRANDON	1 MID	31	29	0.90	45	3.05	93	22	5.6	3.06	2	4	7.2	272	89	7.0	6.2	120	120	25	(2)	6 (10) <u>32</u>
ITASCA	1 MID LT SP	32	30	0.96	46	4.04	94	22	4.8	5.03	2	4	8.0 <u>2</u>	278	91	6.6	5.5	120	120	31	(6)	13 (30) <u>36</u>
ROSEBUD	1 MID LT SP	32	30	0.89	44	3.05	93	20	4.8	3.06	1	4	5.0 <u>2</u>	263	87	6.5	5.5	120	120	24	(2)	8 (30) <u>32</u>
WACO	1 SLM	41	30	0.93	44	3.05	97	20	4.7	4.07	2	4	7.0 <u>2</u>	284	98	6.6	5.8	120	120	21	(6)	7 (12) <u>38</u>
	2 SLM	41	30	0.94	46	3.08	97	21	4.6	4.00	2	4	6.8 <u>2</u>	283	99	6.4	5.8	120	130	22	(10)	7 (12) <u>41</u>

Table 3 --Cotton, American upland medium staple: Quality characteristics by production areas, crop of 1978

Production Area, Classification & Sample Number		Fiber Test Results										Processing Test Results - Carded Yarns										
		Digital Fibrograph		Fiber Strength		S.A. Non- Lint		Color Raw Stock		P & C Waste		Strength		Elongation		Appearance Index		Imperfect's Neps/M Yards		Spin Potential		
No	Grade	Stple	2.5% span	Unif.	Mike	Zero 1/8"	Gage	G/tex	Pct	Rdg	Mpsi	Pct	No	Pct	Lbs	Pct	Lbs	Pct	No	No	No	No
32s	In	In	Pct																			
SOUTHWEST		AREA																				
SOUTH TEXAS		STONEVILLE 213																				
EAST BERNARD		31	33	1.02	46	4.8	92	23	5.1	2.4	1	4	5.4	96	28	5.5	3.8	90	70	14	(84)	11(306)42
GANADO		41	34	1.07	46	4.5	91	23	6.2	3.2	1	3	5.6	102	31	6.3	4.4	80	60	19	(84)	15(342)50
1 SLM	41	34	1.07	47	5.1	91	23	5.3	4.0	2	3	5.6	103	33	6.4	4.7	80	70	19	(136)	16(400)52	
2 SLM	41	34	1.07	47																		
HARGILL		41	33	1.04	46	4.4	97	23	4.9	2.0	3	4	5.4	100	32	4.9	3.8	80	60	16	(58)	13(370)47
SANTA ROSA		41	34	1.09	48	4.9	91	24	5.3	3.0	1	3	5.5	109	37	5.8	4.5	80	70	13	(84)	7(290)61
TAFT		51	33	1.05	44	4.0	85	22	5.7	4.7	2	3	7.7	107	33	6.3	4.6	70	60	26	(134)	18(416)53
CENTRAL TEXAS		STONEVILLE 213																				
AQUILLA		31	30	0.90	43	3.3	94	21	4.7	3.8	1	4	7.2	65	23 2/	4.5	4.7	70	60	18	(66)	15(242)25
1 MID	31	31	0.98	45	4.5	92	22	5.2	3.5	1	4	6.1	86	26 2/	5.3	4.3	80	70	14	(76)	12(348)39	
2 MID	31	31	0.98	45																		
BATESVILLE		41	34	1.10	45	4.7	85	23	5.5	3.3	1	4	6.0	102	33	6.2	4.8	90	70	15	(90)	10(306)49
FERRIS		41	31	0.95	43	3.6	98	21	4.7	4.2	3	4	8.3	76	23 3/	4.8	4.3	70	60	24	(52)	18(298)36
NAVASOTA		32	34	1.13	47	5.0	85	26	6.2	2.3	2	4	3.8	112	37	6.5	4.6	110	80	9	(40)	9(242)57
1 MID LT SP	32	34	1.13	47																		

1/ Parentheses indicate the neps per 1000 yards of yarn as measured by the Uster instrument.  
 2/ End breakage too high to spin 50s yarn. 36s yarn spun and strength adjusted to equivalent of 50s.  
 3/ End breakage too high to spin 50s yarn. 44s yarn spun and strength adjusted to equivalent of 50s.



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